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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/510,555

10/07/2004

Andrew James Goodwin

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9247

27305

7590

08/20/2008

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EXAMINER

SELLMAN, CACHET I

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

08/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/510,555	Applicant(s) GOODWIN ET AL.	
	Examiner CACHET I. SELLMAN	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-14,20-26 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 32 and 33 is/are allowed.
- 6) ☒ Claim(s) 1,5,7-14,20-26,31 and 34 is/are rejected.
- 7) ☐ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 5, 7-14, 20-26 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanisaki et al. in view of Kolluri.

Tanisaki et al. teaches a method for treating a powder using a plasma reactor under atmospheric pressure. The process comprises introducing a monomer gas into the reaction chamber (col. 4, lines 20-54 and Fig. 1) and separately transporting the powder substrate to be coated into the atmospheric discharge (col. 3, lines 52-66) and exposing the powdered substrate to the monomer gas.

Tanisaki et al. fails to teach atomizing the liquid coating forming material as required by **claims 1 and 25**.

Kolluri discloses a monomer delivery system that is used for a chemical vapor deposition apparatus, which comprises at least one ultrasonic atomizing nozzle for supplying a vaporized liquid monomer to the reaction to deposit a film on a substrate (abstract). Kolluri's process provided a substantially uniform atomized mist at a precise

and controlled rate to the chamber and deposits uniform coatings on all sizes of substrates without the need for expensive or complex arrangements (see page 3, lines 12-17). Kolluri states that the uniformity of the coating can be achieved on stationary or moving substrates (see page 7, line 5). Kolluri shows that the coating can be applied to films, fabrics, or webs (see page 7, line 28-30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Tanisaki et al. to include the monomer delivery system of Kolluri. One would have been motivated to do so because both disclose process where a film is formed on a substrate using a vaporized monomer and Kolluri further teaches using the ultrasonic atomizing nozzle provides a substantially uniform atomized mist at a precise and controlled rate to the chamber and deposits uniform coatings on all sizes of substrates without the need for expensive or complex arrangements.

It is well known in the art to transport particles such as pigments and those material being coated in the Tanisaki reference using a web especially if the coated particles are being applied to some form of paper especially the white pigments it would reduce the need to remove the powdered substrate and they applying it to the paper substrate and etc. Kolluri shows an embodiment wherein a nonwoven material is moved through the chamber and therefore one having ordinary skill in the art would have a reasonable expectation of success of using a nonwoven web to transport the powdered material through the chamber of Kolluri. The reel to reel web support can be a nonwoven fabric see (page 7) as required by claim 5. The

material is directly injected (see Figures) as required by **claim 7**. The powdered substrate can be metal oxides, dystuffs, metals, silicas and silicates (see col. 4, line 55 - col. 5, line 22) as required by **claim 8**.

As to **claims 9-13 and 20-24**, It is ell settled that the intended use of a claimed apparatus is not germane to the issue of the patentability of the claimed structure. If the prior art structure is capable of performing the claimed use then it meets the claim. *In re Casey*, 152 USPQ 235, 238 (SSPA 1967); *In re Otto*, 136 USPQ 459 (CCPA 1963). It is well settled that the intended uses of and the particular material used in a coating apparatus have no significance in determining patentability of apparatus claims . *Ex parte Thibault*, 164 USPQ 666 (Bd. Pat. App. 1969).

Tanisaki in view of Kolluri teaches a powder which is coated as required by **claims 14 and 31**.

Response to Arguments

4. Applicant's arguments, see page 9, filed 4/2/2008, with respect to the rejection(s) of claim(s) 1, 5-14, 20-26 and 31 under 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a different interpretation of the previously applied art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CACHET I. SELLMAN whose telephone number is

Application/Control Number:
10/510,555
Art Unit: 1792

Page 5

(571)272-0691. The examiner can normally be reached on Monday through Friday,
7:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cachet I Sellman
Examiner
Art Unit 1792

/C. I. S./

Examiner, Art Unit 1792

/William Phillip Fletcher III/

for Timothy H. Meeks, SPE of Art Unit 1792/1700